

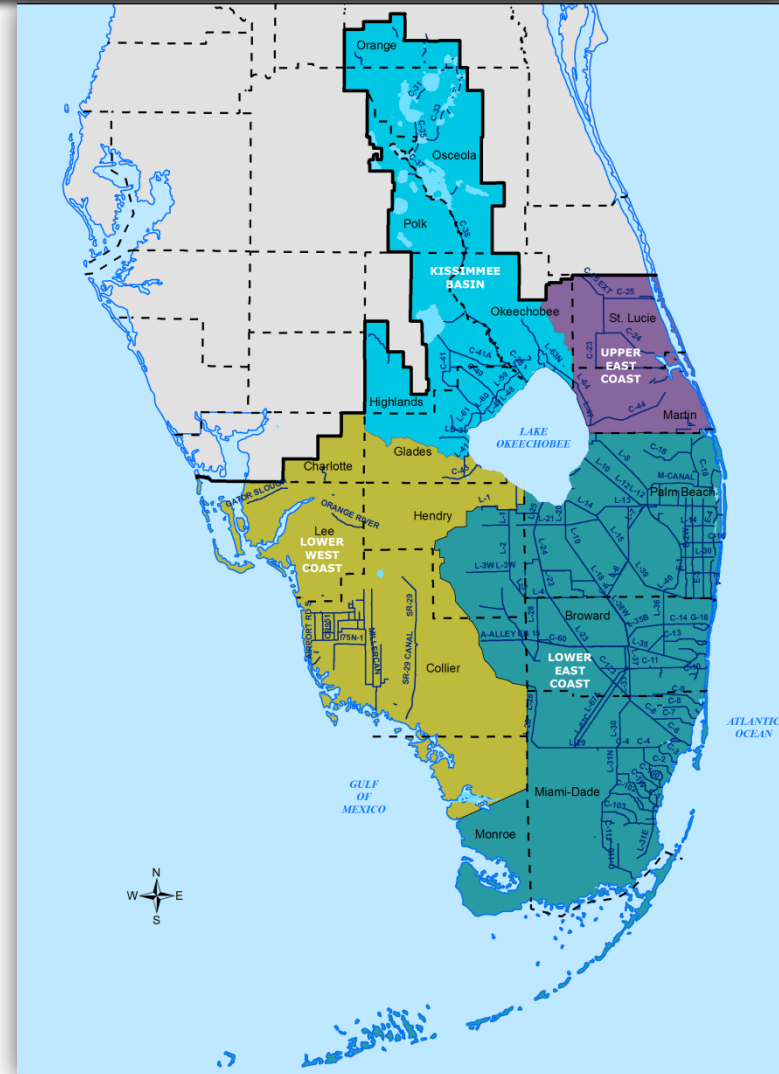


2011 Upper East Coast Water Supply Plan Update

**Mark Elsner, PE, Director
Water Supply Development Division
Governing Board Meeting
January 12, 2011**

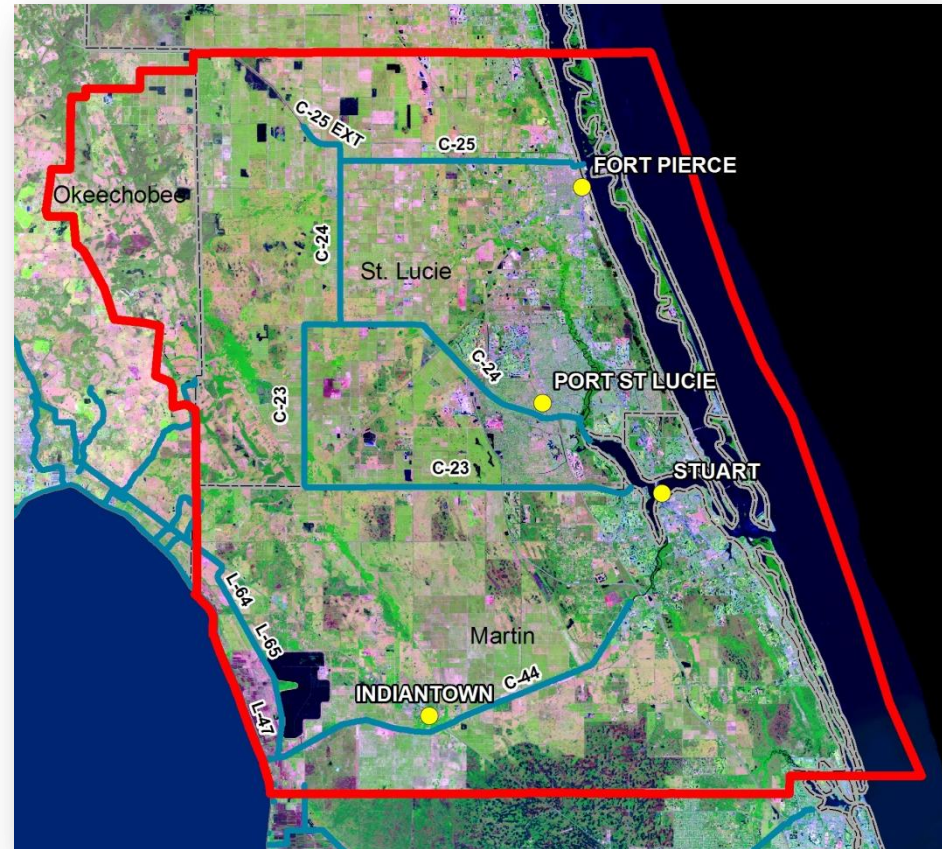
Water Supply Plan Requirements

- 20 year Planning Period
- 1-in-10 Level of Certainty
- Water Resource Development
 - District takes lead
- Water Supply Development
 - Responsibility of water users
 - Linkage to Local Governments
- Minimum Flows and Levels (MFLs)
 - Recovery and Prevention Strategies



2011 Upper East Coast Update

- Planning Horizon 2010 - 2030
- Population projected to increase from 437,118 in 2010 to 791,863 people in 2030
- Irrigated agricultural acreage forecast to increase from 95,116 acres to a range of about 97,587 - 115,768 acres.
- Overall water demands estimated to increase from 230 MGD to approximately 320-340 MGD

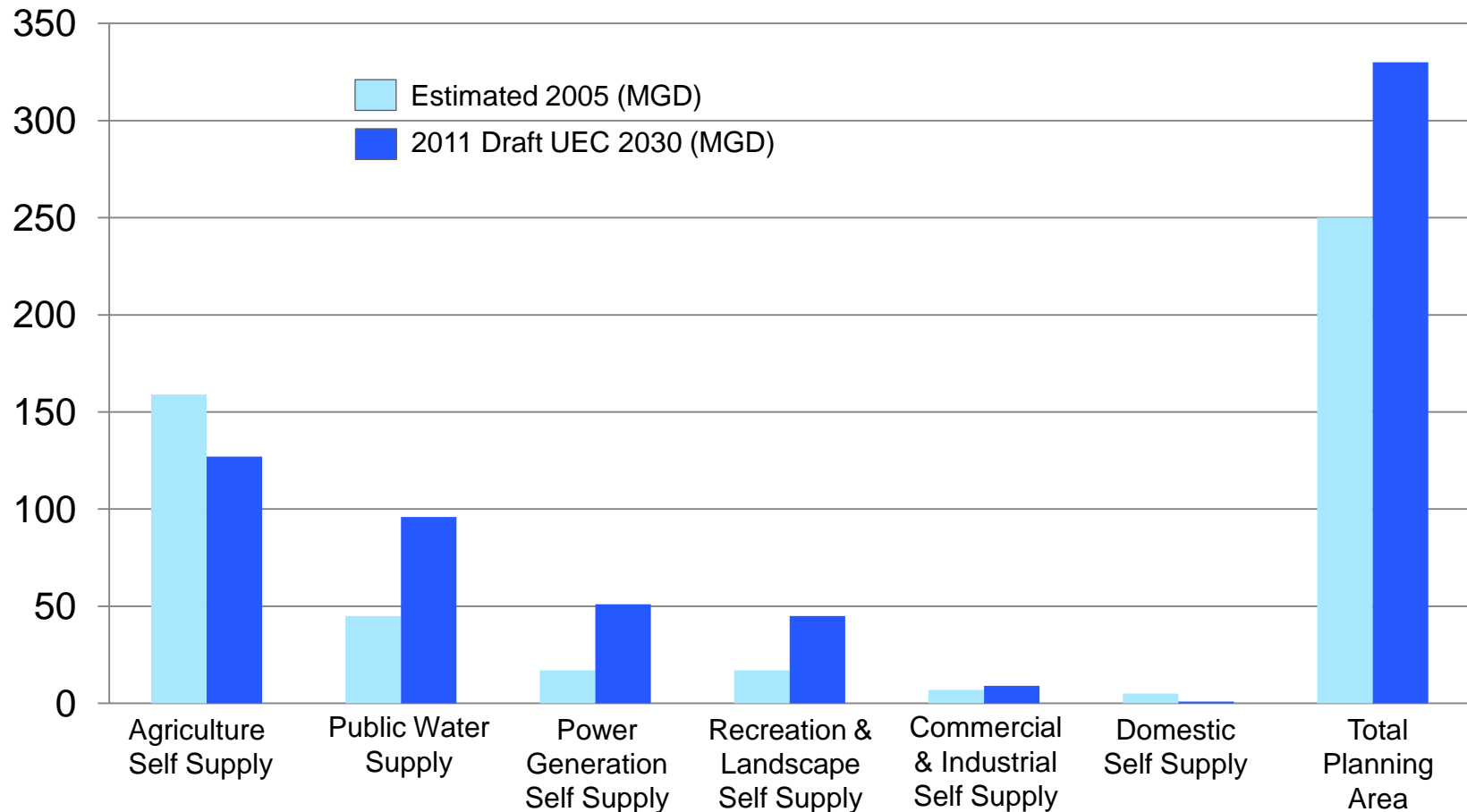


2011 Plan Update Status

- Water Resources Advisory Commission
 - Serves as overall forum
- Four public workshops held to date
- Meetings held with stakeholders, local governments & utilities (37)
- Presentations to local elected bodies (10)
- Draft UEC documents distributed
 - Discussed at WRAC issues workshop on December 15
 - Discussed at WRAC meeting on January 6
 - Receiving written comments through February 10



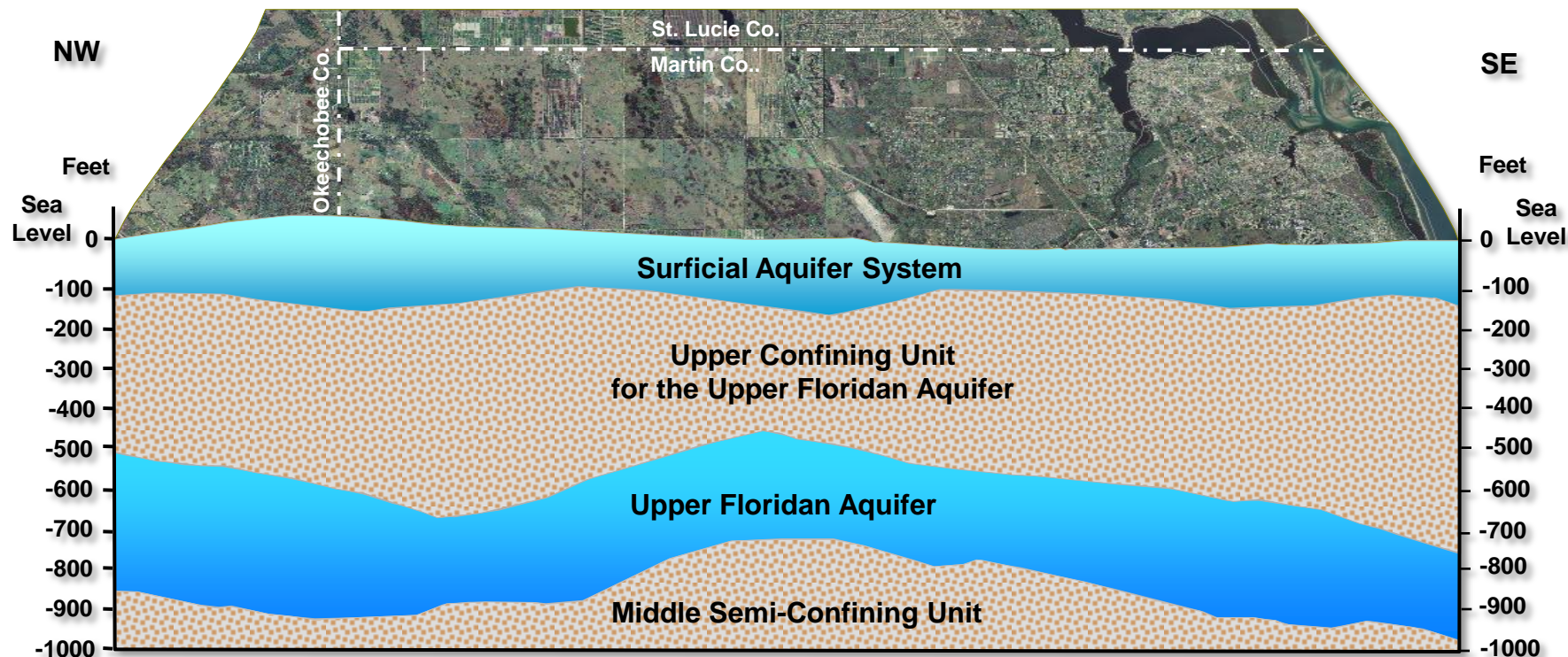
UEC Demands and Projections



UEC Demands and Projections 2004/2006 vs 2011

	2004/2006 UEC	2011 Draft UEC
Category	2025 (MGD)	2030 (MGD)
Agriculture Self-Supply	197	117-137
Public Water Supply	102	96
Domestic Self-Supply	3	1
Recreation and Landscape Self-Supply	24	45
Power Generation Self-Supply	47	51
Commercial and Industrial Self-Supply	5	9
Total Planning Area	378	320 - 340

Generalized Cross Section of Upper East Coast



Water Supply Issues

- Increases in withdrawals from surficial aquifer limited
 - Wetlands
 - Salt water intrusion
- Surface water availability (storage) limited
- Freshwater discharges affecting health of coastal resources
 - Timing
 - Volume



Water Source Options

Conservation

Reclaimed Water

**Surficial
Aquifer
System**

**Aquifer
Storage
& Recovery**

Reservoirs

Surface Water

**Floridan
Aquifer System**

Seawater



Water Source Options

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Reservoirs

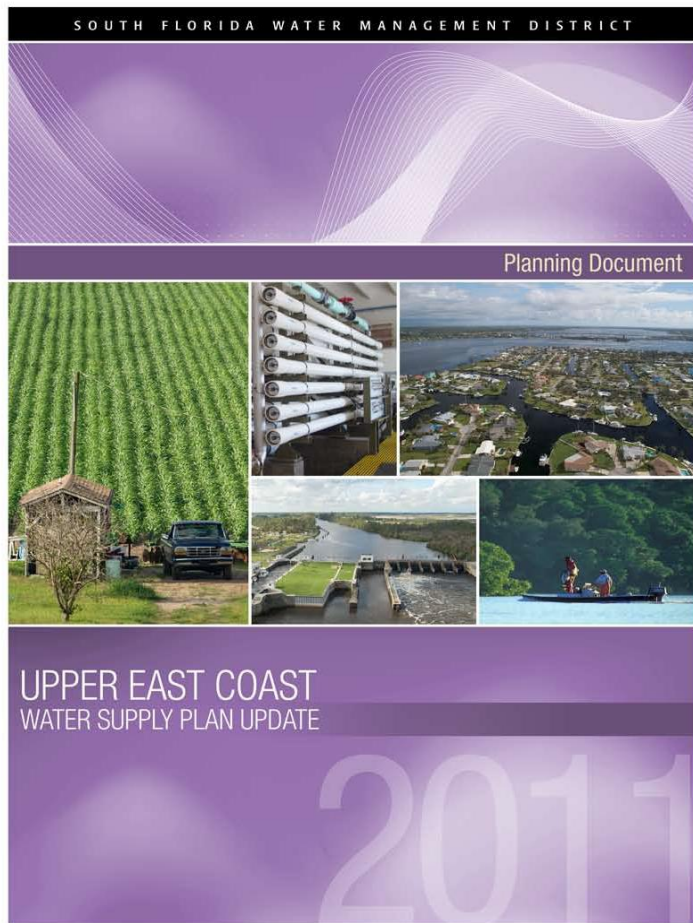
Surface Water

**Floridan
Aquifer System**

Seawater



2011 UEC Water Supply Plan Update Overall Conclusion



The needs of the region can continue to be met with appropriate management and diversification of water supply sources during a 1-in-10 year drought condition through 2030.

Public Water Supply

- Continued use of **surficial aquifer**
- Fresh water aquifer withdrawals maximized
 - No additional water available in coastal areas
- Increased use of **Floridan aquifer**
- Look for opportunities for increased efficiency through water **conservation**



Recreation/Landscape Irrigation

- Continued use of [surficial aquifer](#)
- Freshwater aquifers withdrawals maximized
 - No additional water available in coastal areas
- Increased use of [reclaimed water](#), especially in areas where fresh water aquifers are maximized
- Look for opportunities for increased efficiency through water [conservation](#)



Agricultural Irrigation

- Continued use of [surface water](#) as primary source & [Floridan aquifer](#) as supplemental source
- Increases in [storage](#) via CERP project and other options should enhance surface water availability
- Look for opportunities for increased efficiency through water [conservation](#) and Best Management Practices (BMPs) Program
- Stormwater retention/tailwater recovery where possible



Natural Resources

- Implementation of surface water **storage** projects will improve water resource management
 - CERP Indian River Lagoon - South
 - Ten-Mile Creek Reservoir/Stormwater Treatment Area
- Established **Minimum Flows and Levels** to protect resources from significant harm

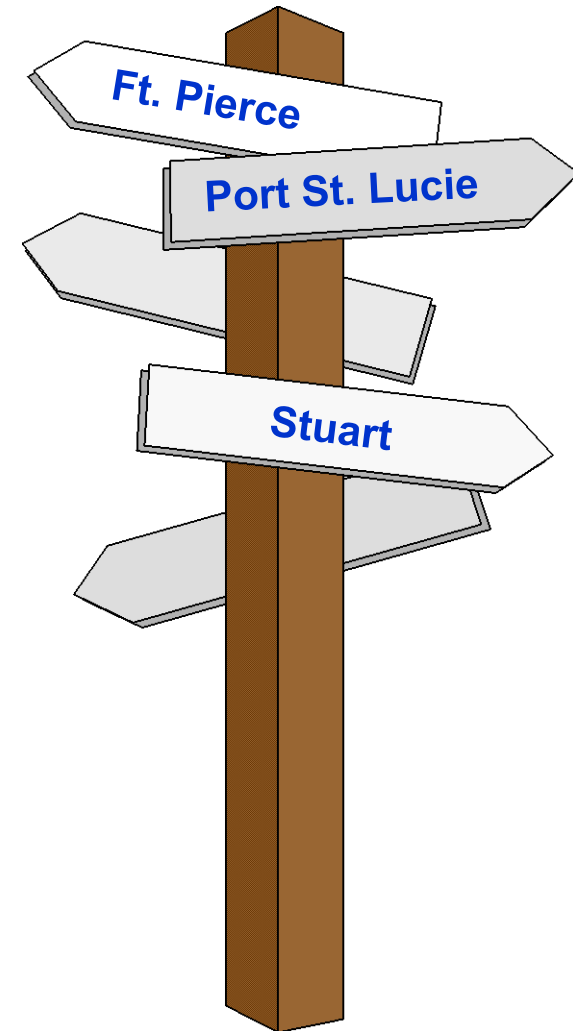


Additional Future Direction

- Complete East Coast Floridan Aquifer model
 - Collaborate with local users for data
- Continue aquifer monitoring programs
- Implement CERP
- Continue to encourage and promote water reuse and conservation measures
- Continue to identify the impact of sea level rise on utility wellfields at risk of saltwater intrusion
- Continue to coordinate with local governments and utilities on water supply related elements such as the water supply facility work plan that is due within 18 months of adoption of the UEC Plan Update

What's Next?

- Receive written comments - February 10
- Presentations to local governments - January - February
- WRAC Issues Workshop (if necessary) - February 24
- Final Plan to WRAC - March 3
- Final Plan to Governing Board - March 10
 - St. Lucie County



Questions

www.sfwmd.gov
Upper East Coast

